A2 cont'd

transaction data nor the unique identifiers of the secure endorsed transactions have been altered prior to execution of the verification process.

A3

24. (Amended) A system for generating secure endorsed transactions having transaction data representative of transactions and unique human identifiers corresponding to parties endorsing the transactions, the system comprising:

means for receiving transaction data and unique human identifiers; [and]

means for generating unique codes from the transaction data and unique human identifiers, wherein the unique codes constitute secure endorsements of the transaction data by the parties corresponding to the unique human identifiers; and

means for transmitting the unique codes.

REMARKS

Applicants submit this Amendment in response to the Office Action mailed November 30, 1998.

Applicant has canceled claim 28 and amended claims 1-3, 17 and 24 to clarify certain aspects of the invention.

The Examiner in the Office Action requested a substitute specification due to damage done to the original specification while mounting it in the file wrapper. As indicated above, the Applicants have filled concurrently with this Amendment a copy of the as filed original application. The Examiner rejected claims 1-4 and 28 under 35 U.S.C. §103(a) as being unpatentable over Donald W. Davies "Use of the 'Signature Token' to create a Negotiable Document ("Davies") in view of Even et al. "Electronic

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Wallet" ("Even"), and rejected claims 5-23 and 29-31 under 35 U.S.C. §103(a) as being unpatentable over Davies in view of U.S. Patent No. 4,825,050 to Griffith et al. ("Griffith") and further in view of U.S. Patent No. 5,689,565 to Spies ("Spies").

Regarding the §103 rejection of claims 1-4 and 28, Applicants respectfully traverse this rejection.

Claim 1 is drawn to a combination of elements including a step that involves using unique identifiers for generating secure endorsed transactions.

The Examiner states at page 3 of the Office Action "Davies discloses a method of generating secure endorsed transactions . . . comprised of transaction data . . . and unique identifiers (see figure 1, items 5, 13, and implicitly 16). The elements relied upon by the Examiner as a teaching of a unique identifier are 5 (customer identity), 13 (beneficiary identity), and 16 (signature of 9-15 by customer). As stated in the last paragraph on page 378 of Davies, figure 1, which includes all of the elements cited by the Examiner, is a possible format for a 'cheque.' Regarding elements 5 and 13 of Davies, there is no teaching or suggestion by Davies that the identity of either the customer or beneficiary of the cheque are unique.

Regarding the "signature of 9-15 by the customer," the last paragraph on page 378 of Davies states "[t]his is a 'smart card' with its own display and key pad and capable of generating a digital signature . . . . The PIN is checked by the card and does not enter from a 'foreign keypad.'" The problem the disclosure is intended to overcome is stated at page 378 as "[h]ow can the off-line terminal know that a card is genuine without possessing an 'important' secret key - e.g. one which is general to a card

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issuer?" When a customer attempts to make a transaction, the customer must enter a secret PIN number into the card, at which time, the card provides an "digital signature" to confirm that the correct PIN number was used to access the card. Davies does not teach or suggest that this "digital signal" is unique.

Further, there is no teaching or suggestion of combining the elements cited by the Examiner into a unique code. The elements cited are, as cited above, combined to form a cheque. This cheque, however, does not correspond to a unique code as claimed.

Additionally, Even fails to correct the deficiencies in Davies.

For at least the above reasons, Davies and Even, alone or in any reasonble combination, fail to teach or suggest the combination of elements recited in claim 1.

This distinction, however, is moot in view of the amendment to claim 1. As stated by the Examiner at page 4 of the Office Action "Davies and Even . . . do not teach that a "human identifier," e.g. a biometric, can be used with such an encryption scheme to further enhance security." Davies and Even, therefore, alone or in any reasonable combination, fail to teach or suggest a combination of elements including the use of a unique human identifier.

Regarding claims 2-4 and 25-27 these claims are at least patentable in view of their dependency from independent claim 1.

Regarding the §103 rejection of claim 24, for at least the reasons presented above with respect to claim 1, claim 24 is patentable over the applied references.

Regarding the §103(a) rejection of claim 5, Applicants respectfully traverse this

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rejection.

Claim 5 is directed to a combination including the generation of unique codes from transaction data and unique human identifiers, wherein the unique codes constitute secure endorsements of the transaction data by the individuals corresponding to the unique human identifiers.

The Examiner states at page 4 of the Office Action:

> Davies and Even . . . do not teach that a "human identifier", e.g. a biometric, can be used with such an encryption scheme to further enhance security. Griffith teaches that "Multiple inputs are accepted in the following manner: The individual information record 101 which is the data to be 'locked'; the individual identifier 100 which may be some characteristic of the individual e.g. finger, voice or retinal pattern, signature, or chemical structure or some information known only to the individual, e.g. a combination, pass word or phrase; a private key 110 which is known only to the issuing entity and which is generated by any method 109 meeting the criteria for public key crypto systems . . . and optionally other data 113 which is necessary or convenient to include regarding the application made of the present method." Thus, Griffith teaches that the public/private key method can be used with a "human identifier" to thwart fraud.

The Examiner, however, has misconstrued the applicability of the combination of references to Applicants' claimed invention.

Griffith refers to a method which may be used to "lock" information. (Column 2, lines 32-33). The individual identifier 100 is used to unlock the "locked" information 101 (column 2, lines 35-38). The individual identifier, therefore, acts as a key to provide access to information that could not be obtained without the key.

The closest allegory to the concept of "locking" information using a identifier in Davies relates to the use of a PIN number to access information stored within the "smart card," which cannot be accessed without the PIN number (first paragraph of

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page 379). Once the PIN number is entered, the information stored within the card is unlocked, so that a transaction attempted by the card can be completed. The combination of the use of an identifier of Griffith with the "smart card" of Davies, therefore, would replace the PIN number access mode of Davies with individual identifier 100 of Griffith. Such a combination is distinct from Applicants' claimed invention.

Upon entry of the PIN number into the "smart card" of Davies, the use of the PIN number is ended. A unique code is not generated from the combination of the transaction data and the PIN number. There is simply no reason to then transmit the PIN number to the bank once the identification of the user as the proper owner of the card using the PIN number. Instead, one of the advantages to the invention of Davies is that the identifier of the person (*i.e.*, the PIN number) remains internal to the card at all times and is never transmitted.

In the present invention, moreover, the individual human identifier is combined with the transaction data into a unique code which is then transmitted as an endorsement to the transaction. There is no teaching or suggestion in Davies or Griffin that the element used to access the information stored therein should then be transmitted to a remote location. This would be counterproductive to the use of such an identifier.

Further, neither Davies nor Griffin teach or suggest the use of the identifier as an endorsement to the transaction. To endorse is defined by the American Heritage College Dictionary as "1. To write one's signature . . . as evidence of the legal transfer

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of . . . ownership . . . 2. To place (one's signature), as on a contract, to indicate approval of its contents or terms. 3. To acknowledge (receipt or payment) by signing a bill or other instrument." All of these definitions relate to a manifestation of the individuals consent to the item endorsed.

The manifestations of the individual identifier of Griffin and the PIN number of Davies are used in order to initiate a process within the apparatus used. In contrast, the identifier of the present invention is used at a later time in order to confirm the authenticity of the transaction in the form of an endorsement.

Even and Spies fail to cure the defects in the combination of Davies and Griffin. Specifically regarding Even, the "secret password" (column 1, page 199) is indistinguishable in use from the identifier and PIN number of Griffin and Davies respectively. For the above reasons, therefore, Applicants assert that claim 5 is patentable over the applied references.

Regarding claims 6-10, 20, 21, 22 these claims are patentable, at least, in view of their dependency from independent claim 5.

Regarding the §103 rejection of independent claims 11, Applicants respectfully traverse this rejection and assert that claim 11 is patentable for essentially the same reasons presented above with respect to claim 5. Regarding claims 12, 13, 14, 29, 30, and 31, these claims are patentable, at least, in view of their dependency from independent claim 11.

Regarding the §103 rejection of independent claims 15, 16, 19 and 23, for the same reasons cited above with respect to claim 5, Applicants assert that these claims

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are patentable over the applied references. Further, there is no teaching or suggestion of comparing unique codes received from a secure transaction against generated unique codes. This step involves a second step of generating a unique code, wherein after the signal is received the transaction data and identifier are again combined into a unique code. If any changes in the data transmitted have occurred, the comparison will determine that such change has occurred. After the sending of information in the references cited by the Examiner, there is no confirmation that the data has not been tampered with. For this additional reason, Applicants assert that claims 15, 16, 19 and 23 are patentable over the applied references.

Regarding claims 17 and 18, these claims are at least patentable in view of their dependency from independent claim 16.

In view of the foregoing amendments and remarks, Applicant respectfully requests the reconsideration and reexamination of this application and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

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By: _____
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